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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/062,651	01/31/2002	Naoaki Komiya	YKI-0082	2162

23413 7590 06/15/2004

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EXAMINER

NGUYEN, KEVIN M

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/062,651	Applicant(s) KOMIYA, NAOAKI	
	Examiner Kevin M. Nguyen	Art Unit 2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>05/28/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on 05/28/2004 is entered. The rejections of claims 1-7 are maintained.

Drawings

2. The drawings were received on 05/28/2004. These drawings are acknowledged and approved.

Information Disclosure Statement

3. The information disclosure statement filed 05/28/2004 which has been placed in the application file, the information referred to therein has been considered as to the merits.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Friend et al (US 6,429,601).

As to claim 1, Friend et al teach an organic electroluminescent EL display comprising a plurality of pixels/organic EL elements (19a, 19b, 19c, 19d), a plurality of driving transistors (15a, 15b, 15c, 15d), a plurality of data lines (11a, 11b, 11c, 11d)

(figure 5, column 5, lines 34-48), the transistors size of each of driving transistors correspond to the light-emitting areas differs from that of the other driving transistors correspond to the other light-emitting areas (figure 3, column 7, lines 58-63), gray scale display is effected by controlling the number of transistors to be switched on in order to vary the number of EL elements which are switched on in each pixel (19a) (figure 7, column 8, lines 8-17).

As to claim 2, Friend et al teach the transistors size of each of driving transistors correspond to the light-emitting areas are set so that the sizes are sequentially doubled (figure 3, column 7, lines 65-67).

As to claim 3, Friend et al teach the size of the transistor is determined by the gate length and/or gate witch of the transistor (15a), associated with the light-emitting area (19a) (figure 3, column 7, lines 58-67).

As to claim 4, Friend et al teach the light emission areas of a plurality of EL elements within one pixel are varied (column 7, lines 50-57).

As to claim 5, Friend et al teach the light emission area of the EL elements connected to the larger driving transistor is increased (figure 3, column 7, lines 58-67).

As to claim 6. Friend et al teach the driving period of the driving transistor of each pixel is divided into a plurality of sub-fields; and the duration of ON condition of each EL element is controlled by controlling the on/off condition in each sub-field (figures 7 and 8, column 8, lines 3-20).

As to claim 7, Friend et al teach the lengths of a plurality of sub-fields are set so that they are sequentially doubled (figure 8, column 8, lines 3-20).

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6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kimura (cited in IDS, US 6,518,941) teaches the same structure of Friend's prior art, an organic electroluminescent EL display comprising the thin film transistors are preferably the polycrystalline silicon thin film transistors. This makes it possible to implement larger areas (fig. 2, col. 3, lines 9-13).

Response to Arguments

7. Applicant's arguments filed 05/28/2004 have been fully considered but they are not persuasive.

In response to applicant's argument that claim 1 recites "the transistor size of each of said driving transistors differs from that of the other driving transistors." This argument is not persuasive because Friend et al teaches each switch means suitably comprises at least one transistor (col. 3, lines 55-56). A switch arrangement associated with each pixel and comprising switch means each associated with a respective light-emitting area of the pixel for switching power to that area (col. 4, lines 37-40). Where each pixel is divided into separate light-emitting areas the light-emitting areas of each pixel are suitably of different sizes, preferably of different areas (col. 4, lines 47-49). These arguments are not persuasive because the teaching of Friend et al recited in col. 3, lines 55-56, col. 4, lines 37-40, and col. 4, lines 47-49 meets the claimed limitation "the transistor size of each of said driving transistors differs from that of the other driving transistors."

For these reasons, the rejections based on Friend et al have been maintained.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kevin M. Nguyen** whose telephone number is **703-305-6209**. The examiner can normally be reached on MON-THU from 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reached on **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

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Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kevin M. Nguyen
Patent Examiner
Art Unit 2674

KN
June 11, 2004


XIAO WU
PRIMARY EXAMINER